

LISTING OF CLAIMS:

1-64. (Canceled)

65. (Currently Amended) A method for administration of a substance to a mammal, the method comprising injecting the substance into the dermis of the mammal by bolus administration, wherein improved systemic absorption is produced relative to absorption produced upon injecting the substance subcutaneously by bolus administration and wherein the substance is ~~a growth hormone~~, a low molecular weight heparin or a dopamine receptor agonist.

66. (Canceled) ~~The method of claim 65 wherein the substance is a human growth hormone.~~

67. (Previously presented) The method of claim 65 wherein the substance is a low molecular weight heparin.

68. (Previously presented) The method of claim 65 wherein the substance is a dopamine receptor agonist.

69. (Previously presented) The method of claim 65 wherein the substance is in the form of nanoparticles.

70. (Previously presented) The method of claim 65 wherein the injecting is through at least one hollow needle, by electroporation, or by thermal poration.

71. (Previously presented) The method of claim 70 wherein the injecting is through at least one hollow needle.

72. (Previously presented) The method of claim 71 wherein the at least one hollow needle comprises an array of microneedles.

73. (Canceled) ~~The method of claim 65 wherein the substance is administered by bolus injection.~~

74. (Previously presented) The method of claim 73 wherein the substance is administered by repeated bolus injections.

75. (Currently Amended) A method for administration of a substance to a mammal, the method comprising selectively injecting the substance into the dermis of the mammal by bolus administration to obtain systemic absorption of the substance from the dermis, wherein improved systemic absorption is produced relative to absorption produced upon injecting the substance subcutaneously by bolus administration and wherein the substance is a growth hormone, a low molecular weight heparin or a dopamine receptor agonist.

76. (Previously presented) The method of claim 75 wherein selectively injecting the substance into the dermis is through at least one hollow needle, by electroporation or by thermal poration.

77. (Previously presented) The method of claim 76 wherein selectively injecting the substance into the dermis is through at least one hollow needle having a length and outlet selected for their suitability for delivering the substance into the dermis to obtain systemic absorption of the substance from the dermis.

78. (Canceled) ~~The method of claim 75 wherein the substance is a human growth hormone.~~

79. (Previously presented) The method of claim 75 wherein the substance is a low molecular weight heparin.

80. (Previously presented) The method of claim 75 wherein the substance is a dopamine receptor agonist.

81. (Previously presented) The method of claim 75 wherein the substance is in the form of nanoparticles.

82. (Previously presented) The method of claim 77 wherein the at least one hollow needle comprises an array of microneedles.

83. (Canceled) ~~The method of claim 75 wherein the substance is selectively injected into the dermis to obtain improved systemic absorption compared to absorption produced upon subcutaneous administration of the substance.~~

84. (Canceled) ~~The method of claim 75 wherein the substance is administered by bolus injection.~~

85. (Previously presented) The method of claim 84 wherein the substance is administered by repeated bolus injections.

86. (Currently Amended) A method for administration of a substance to a mammal, the method comprising selectively injecting the substance into the dermis of the mammal by bolus administration, wherein systemic absorption of the substance from the dermis is produced relative to absorption produced upon injecting the substance subcutaneously by bolus administration and wherein the substance is ~~a growth hormone~~, a low molecular weight heparin or a dopamine receptor agonist.

87. (Previously presented) The method of claim 86 wherein selectively injecting the substance into the dermis is through at least one hollow needle, by electroporation or by thermal poration.

88. (Previously presented) The method of claim 87 wherein the method comprises selectively injecting the substance into the dermis through at least one hollow needle having a length and outlet selected for their suitability for delivering the substance into the dermis.

89. (Canceled) ~~The method of claim 86 wherein the substance is a human growth hormone.~~

90. (Previously presented) The method of claim 86 wherein the substance is a low molecular weight heparin.

91. (Previously presented) The method of claim 86 wherein the substance is a dopamine receptor agonist.

92. (Previously presented) The method of claim 86 wherein the substance is in the form of nanoparticles.

93. (Previously presented) The method of claim 87 wherein the at least one hollow needle comprises an array of microneedles.

94. (Canceled) ~~The method of claim 86 wherein absorption of the substance in the dermis produces improved systemic absorption compared to absorption produced upon subcutaneous administration of the substance.~~

95. (Canceled) ~~The method of claim 86 wherein the substance is administered by bolus injection.~~

96. (Previously Presented) The method of claim 95 wherein the substance is administered by repeated bolus injections.

97. (Withdrawn) A device for administering to a mammal, a composition which comprises a growth hormone, a low molecular weight heparin or a dopamine receptor agonist, the device being configured to selectively deliver the composition into the dermis to obtain systemic absorption of the composition, wherein the device is an electroporation injection system or a thermal poration injection system.

98. (Withdrawn) A device for administering to a mammal, a composition which comprises a growth hormone, a low molecular weight heparin or a dopamine receptor agonist, the device being configured to selectively deliver the composition into the dermis, wherein systemic absorption of the composition is obtained, and wherein the device is an electroporation injection system or a thermal poration injection system.

99. (Currently Amended) A method of administering a substance to a mammal, the method comprising selectively delivering the substance to the dermis by bolus administration to achieve improved systemic absorption as compared to systemic absorption produced upon bolus subcutaneous administration of the substance at an identical dose, wherein the substance is ~~a growth hormone~~, a low molecular weight heparin or a dopamine receptor agonist.

100. (Canceled) ~~The method of claim 99 wherein the substance is a human growth hormone.~~

101. (Previously presented) The method of claim 99 wherein the substance is a low molecular weight heparin.

102. (Previously presented) The method of claim 99 wherein the substance is a dopamine receptor agonist.

103. (Previously presented) The method of claim 99 wherein the substance is in the form of nanoparticles.

104. (Previously presented) The method of claim 99 wherein the delivering is through a hollow needle, by electroporation, or by thermal poration.

105. (Previously presented) The method of claim 104 wherein the delivering is through at least one hollow needle

106. (Previously presented) The method of claim 105 wherein the at least one hollow needle comprises an array of microneedles.

107. (Canceled) ~~The method of claim 105 wherein the substance is administered by bolus injection.~~

108. (Previously presented) The method of claim 107 wherein the substance is administered by repeated bolus injections.

109. (Currently Amended) A method for administering a substance to a mammal, the method comprising selectively delivering the substance to the dermis by bolus administration, wherein improved systemic absorption is produced as compared to systemic absorption produced upon bolus subcutaneous administration of the substance at an identical dose, and wherein the substance is ~~a growth hormone~~, a low molecular weight heparin or a dopamine receptor agonist.

110. (Canceled) ~~The method of claim 109 wherein the substance is a human growth hormone.~~

111. (Previously presented) The method of claim 109 wherein the substance is a low molecular weight heparin.

112. (Previously presented) The method of claim 109 wherein the substance is a dopamine receptor agonist.

113. (Previously presented) The method of claim 109 wherein the substance is in the form of nanoparticles.

114. (Previously presented) The method of claim 109 wherein the delivering is through a hollow needle, by electroporation, or by thermal poration.

115. (Previously presented) The method of claim 109 wherein the delivering is through at least one hollow needle.

116. (Previously presented) The method of claim 115 wherein the at least one hollow needle comprises an array of microneedles.

117. (Canceled) ~~The method of claim 109 wherein the substance is administered by bolus injection.~~

118. (Previously presented) The method of claim 117 wherein the substance is administered by repeated bolus injections.